

SEQUENCE LISTING

<110> Merck & Co., Inc.

<120> Antigen-Binding Proteins Targeting

S. Aureus ORF0657n

<130> 22319Y PCT

<150> 61/007,998

<151> 2007-12-17

<150> 60/932,788

<151> 2007-05-31

<160> 54

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 215

<212> PRT

<213> Artificial Sequence

<220>

<223> mAb CS-D7 light chain

<400> 1

Glu	Ile	Val	Met	Thr	Gln	Ser	Pro	Ala	Thr	Leu	Ser	Val	Ser	Pro	Gly
1				5					10					15	
Glu	Arg	Ala	Thr	Leu	Ser	Cys	Arg	Ala	Ser	Gln	Tyr	Val	Ser	Asp	Asn
			20					25					30		
Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln	Ala	Pro	Arg	Leu	Leu	Ile
		35					40					45			
Tyr	Gly	Ala	Ser	Thr	Arg	Ala	Thr	Gly	Val	Pro	Ala	Arg	Phe	Ser	Gly
	50					55				60					
Ser	Gly	Ser	Gly	Thr	Glu	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Ser
65					70				75					80	
Glu	Asp	Phe	Ala	Val	Tyr	Tyr	Cys	Gln	Gln	Tyr	Asn	Asn	Trp	Arg	Pro
				85					90					95	
Val	Thr	Phe	Gly	Gln	Gly	Thr	Arg	Leu	Glu	Ile	Lys	Arg	Thr	Val	Ala
			100					105					110		
Ala	Pro	Ser	Val	Phe	Ile	Phe	Pro	Pro	Ser	Asp	Glu	Gln	Leu	Lys	Ser
		115					120					125			
Gly	Thr	Ala	Ser	Val	Val	Cys	Leu	Leu	Asn	Asn	Phe	Tyr	Pro	Arg	Glu
	130					135					140				
Ala	Lys	Val	Gln	Trp	Lys	Val	Asp	Asn	Ala	Leu	Gln	Ser	Gly	Asn	Ser
145					150				155					160	
Gln	Glu	Ser	Val	Thr	Glu	Gln	Asp	Ser	Lys	Asp	Ser	Thr	Tyr	Ser	Leu
			165					170					175		
Ser	Ser	Thr	Leu	Thr	Leu	Ser	Lys	Ala	Asp	Tyr	Glu	Lys	His	Lys	Val
			180					185					190		

Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys
 195 200 205
 Ser Phe Asn Arg Gly Glu Cys
 210 215

<210> 2
 <211> 456
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> mAb CS-D7 heavy chain

<400> 2
 Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu
 1 5 10 15
 Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Arg Ser Ser
 20 25 30
 Ser Tyr Tyr Trp Gly Trp Phe Arg Gln Thr Pro Gly Lys Gly Leu Glu
 35 40 45
 Trp Leu Gly Asn Val Phe Phe Ser Gly Ser Ala Tyr Tyr Asn Pro Ser
 50 55 60
 Leu Lys Asn Arg Val Thr Ile Ser Ile Asp Thr Ser Glu Asn Gln Ser
 65 70 75 80
 Ser Leu Lys Leu Thr Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr
 85 90 95
 Cys Ala Arg Pro Gln Ala Tyr Ser His Asp Ser Ser Gly His Ser Pro
 100 105 110
 Phe Asp Leu Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Ala Ser
 115 120 125
 Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr
 130 135 140
 Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro
 145 150 155 160
 Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val
 165 170 175
 His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser
 180 185 190
 Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile
 195 200 205
 Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys Arg Val
 210 215 220
 Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala
 225 230 235 240
 Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro
 245 250 255
 Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val
 260 265 270
 Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val
 275 280 285
 Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln
 290 295 300
 Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln
 305 310 315 320

```

Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala
      325      330
Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro
      340      345      350
Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met Thr
      355      360      365
Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser
      370      375      380
Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr
385      390      395      400
Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr
      405      410      415
Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe
      420      425      430
Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys
      435      440      445
Ser Leu Ser Leu Ser Pro Gly Lys
      450      455

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<210> 3
 <211> 112
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> mAb CS-E11 light chain variable region

```

<400> 3
Gln Ala Val Leu Thr Gln Pro Ser Ser Val Ser Gly Ala Pro Gly Gln
1      5      10      15
Arg Val Thr Ile Ser Cys Thr Gly Asp Arg Ser Asn Ile Gly Ala Thr
      20      25      30
Tyr Asp Val His Trp Tyr Gln Gln Leu Pro Gly Arg Ala Pro Lys Leu
      35      40      45
Leu Ile Tyr Gly Asn His Asn Arg Pro Ser Gly Val Pro Glu Arg Phe
      50      55      60
Ser Gly Ser Lys Ser Gly Ser Ser Ala Ser Leu Ala Ile Ala Gly Leu
65      70      75      80
Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Gln Ser Tyr Asp Ser Gly
      85      90      95
Leu Ser Gly Tyr Val Phe Gly Thr Gly Thr Lys Val Thr Val Leu Gly
      100      105      110

```

<210> 4
 <211> 126
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> mAb CS-E11 heavy chain variable region

```

<400> 4
Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu
1      5      10      15
Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Arg Ser Ser
20      25      30
Ser Tyr Tyr Trp Gly Trp Phe Arg Gln Thr Pro Gly Lys Gly Leu Glu
35      40      45
Trp Leu Gly Asn Val Phe Phe Ser Gly Ser Ala Tyr Tyr Asn Pro Ser
50      55      60
Leu Lys Asn Arg Val Thr Ile Ser Ile Asp Thr Ser Glu Asn Gln Ser
65      70      75      80
Ser Leu Lys Leu Thr Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr
85      90      95
Cys Ala Arg Pro Gln Ala Tyr Ser His Asp Ser Ser Gly His Ser Pro
100     105     110
Phe Asp Leu Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
115     120     125

```

```

<210> 5
<211> 113
<212> PRT
<213> Artificial Sequence

```

```

<220>
<223> mAb CS-C10 light chain variable region

```

```

<400> 5
Gln Ala Val Leu Thr Gln Pro Ser Ser Val Ser Gly Ala Pro Gly Gln
1      5      10      15
Arg Val Thr Ile Ser Cys Thr Gly Gly Ser Ser Asn Ile Gly Ala Gly
20      25      30
Tyr Asp Val His Trp Tyr Gln Gln Ile Pro Gly Thr Ala Pro Lys Leu
35      40      45
Leu Ile Tyr Gly Asn Ser Asn Arg Pro Ser Gly Val Pro Asp Arg Phe
50      55      60
Ser Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Thr Gly Leu
65      70      75      80
Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Gln Ser Tyr Asp Ser Ser
85      90      95
Leu Asn Gly Pro Val Val Phe Gly Gly Gly Thr Lys Val Thr Val Leu
100     105     110
Gly

```

```

<210> 6
<211> 126
<212> PRT
<213> Artificial Sequence

```

```

<220>
<223> mAb CS-C10 heavy chain variable region

```

<400> 6

```

Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu
1          5          10          15
Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Arg Ser Ser
20          25          30
Ser Tyr Tyr Trp Gly Trp Phe Arg Gln Thr Pro Gly Lys Gly Leu Glu
35          40          45
Trp Leu Gly Asn Val Phe Phe Ser Gly Ser Ala Tyr Tyr Asn Pro Ser
50          55          60
Leu Lys Ser Arg Val Thr Ile Ser Ile Asp Thr Ser Glu Asn Gln Ser
65          70          75
Ser Leu Lys Leu Thr Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr
85          90          95
Cys Ala Arg Pro Gln Ala Tyr Ser His Asp Ser Ser Gly His Ser Pro
100         105         110
Phe Asp Leu Trp Gly Arg Gly Thr Met Val Thr Val Ser Ser
115         120         125

```

<210> 7

<211> 108

<212> PRT

<213> Artificial Sequence

<220>

<223> mAb CS-A10 light chain variable region

<400> 7

```

Gln Ser Val Leu Thr Gln Pro Pro Ser Val Ser Val Ser Pro Gly Gln
1          5          10          15
Thr Ala Thr Ile Thr Cys Ser Gly Asp Asn Leu Gly Asp Lys Ser Val
20          25          30
Ser Trp Tyr Gln Gln Lys Ala Gly Gln Ser Pro Val Leu Val Met Ser
35          40          45
Gln Gly Ser Lys Arg Pro Leu Gly Ile Pro Asp Arg Ile Ser Gly Ser
50          55          60
Asn Ser Gly Thr Thr Ala Thr Leu Thr Ile Ser Gly Val Gln Thr Val
65          70          75
Asp Glu Ala Asp Phe Tyr Cys Gln Thr Trp Asp Arg Tyr Thr Gly Val
85          90          95
Val Phe Gly Gly Gly Thr Lys Val Thr Val Leu Gly
100         105

```

<210> 8

<211> 126

<212> PRT

<213> Artificial Sequence

<220>

<223> mAb CS-A10 heavy chain variable region

<400> 8

```

Arg Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Gly
1          5          10          15

```

```

Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Arg Ser Ser
      20      25      30
Ser Tyr Tyr Trp Gly Trp Phe Arg Gln Thr Pro Gly Lys Gly Leu Glu
      35      40      45
Trp Leu Gly Asn Val Phe Phe Ser Gly Ser Ala Tyr Tyr Asn Pro Ser
      50      55      60
Leu Lys Gly Arg Val Thr Ile Ser Ile Asp Thr Ser Glu Asn Gln Ser
      65      70      75      80
Ser Leu Lys Leu Thr Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr
      85      90      95
Cys Ala Arg Pro Gln Ala Tyr Ser His Asp Ser Ser Gly His Ser Pro
      100      105      110
Phe Asp Leu Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
      115      120      125

```

<210> 9
 <211> 111
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> mAb BMV-H11 light chain variable region

```

<400> 9
Gln Ser Val Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln
  1      5      10      15
Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr
      20      25      30
Asn Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu
      35      40      45
Met Ile Tyr Glu Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe
      50      55      60
Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu
      65      70      75      80
Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg
      85      90      95
Ser Thr Arg Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly
      100      105      110

```

<210> 10
 <211> 128
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> mAb BMV-H11 heavy chain variable region

```

<400> 10
Arg Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu
  1      5      10      15
Thr Leu Ser Leu Ile Cys Thr Val Ser Gly Gly Ser Ile Ser Ser Ser
      20      25      30

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```

Ser Tyr Tyr Trp Gly Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu
   35           40           45
Trp Ile Gly Asn Met Phe Tyr Ser Gly Gly Ala Tyr Tyr Asn Pro Ser
   50           55           60
Leu Lys Ser Arg Val Ser Ile Ser Val Gly Pro Ser Ser Asn Gln Phe
   65           70           75           80
Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr
           85           90           95
Cys Ala Arg Pro Leu Gly Tyr Asn Phe Asp Ser Ser Gly Gln Gly Lys
           100           105           110
Ser Ala Phe Glu Ile Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
   115           120           125

```

<210> 11
 <211> 111
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> mAb BMV-E6 light chain variable region

```

<400> 11
Gln Ser Val Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln
 1           5           10           15
Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr
           20           25           30
Asn Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu
           35           40           45
Met Ile Tyr Glu Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe
           50           55           60
Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu
   65           70           75           80
Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg
           85           90           95
Ser Thr Arg Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly
           100           105           110

```

<210> 12
 <211> 128
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> mAb BMV-E6 heavy chain variable region

```

<400> 12
Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu
 1           5           10           15
Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser Ser Ser
           20           25           30
Ser Tyr Tyr Trp Gly Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu
           35           40           45

```

```

Trp Ile Gly Asn Met Phe Tyr Ser Gly Ser Ala Tyr Tyr Asn Pro Ser
 50          55          60
Leu Lys Ser Arg Val Ser Ile Ser Val Gly Pro Ser Ser Asn Gln Phe
65          70          75          80
Ser Leu Lys Leu Thr Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr
      85          90          95
Cys Ala Arg Pro Leu Gly His Asn Phe Asp Ser Ser Gly Gln Gly Glu
      100          105          110
Gly Ala Phe Glu Ile Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser
      115          120          125

```

<210> 13
 <211> 111
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> mAb BMV-D4 light chain variable region

```

<400> 13
Gln Ser Val Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln
 1          5          10          15
Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr
      20          25          30
Asn Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu
      35          40          45
Met Ile Tyr Glu Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe
 50          55          60
Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu
65          70          75          80
Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg
      85          90          95
Ser Thr Arg Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly
      100          105          110

```

<210> 14
 <211> 128
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> mAb BMV-D4 heavy chain variable region

```

<400> 14
Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu
 1          5          10          15
Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser Ser Ser
      20          25          30
Ser Tyr Tyr Trp Gly Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu
      35          40          45
Trp Ile Gly Asn Met Phe Tyr Ser Gly Gly Ala Tyr Tyr Asn Pro Ser
 50          55          60

```



```

Leu Lys Asn Arg Val Ser Ile Ser Val Gly Pro Ser Ser Asn Gln Phe
65          70          75          80
Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr
      85          90          95
Cys Ala Arg Pro Leu Gly Tyr Asn Phe Asp Ser Ser Gly Gln Gly Lys
      100          105          110
Ser Ala Phe Glu Ile Trp Gly Lys Gly Thr Met Val Thr Val Ser Ser
      115          120          125

```

<210> 15
 <211> 111
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> mAb BMV-C2 light chain variable region

```

<400> 15
Gln Ser Val Leu Thr Gln Pro Pro Ser Val Ser Ala Ala Pro Gly Gln
1          5          10          15
Lys Val Thr Ile Ser Cys Ser Gly Ser Thr Ser Asn Ile Gly Asn Asn
      20          25          30
Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met
      35          40          45
Ile Tyr Asp Val Ser Lys Arg Pro Ser Gly Val Pro Asp Arg Phe Ser
      50          55          60
Gly Ser Lys Ser Gly Asn Ser Ala Ser Leu Asp Ile Ser Gly Leu Gln
65          70          75          80
Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp Ser Leu
      85          90          95
Ser Glu Phe Leu Phe Gly Thr Gly Thr Lys Leu Thr Val Leu Gly
      100          105          110

```

<210> 16
 <211> 128
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> mAb BMV-C2 heavy chain variable region

```

<400> 16
Glu Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu
1          5          10          15
Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser Ser Ser
      20          25          30
Ser Tyr Tyr Trp Gly Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu
      35          40          45
Trp Ile Gly Asn Met Phe Tyr Ser Gly Ser Ala Tyr Tyr Asn Pro Ser
      50          55          60
Leu Lys Ser Arg Val Ser Ile Ser Val Gly Pro Ser Ser Asn Gln Phe
65          70          75          80

```

Ser	Leu	Lys	Leu	Thr	Ser	Val	Thr	Ala	Ala	Asp	Thr	Ala	Val	Tyr	Tyr
			85						90					95	
Cys	Ala	Arg	Pro	Leu	Gly	His	Asn	Phe	Asp	Ser	Ser	Gly	Gln	Gly	Glu
			100					105					110		
Gly	Ala	Phe	Glu	Ile	Trp	Gly	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser
		115					120					125			

<210> 17
 <211> 11
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> mAb CS-D7 VL CDR1

<400> 17
Arg Ala Ser Gln Tyr Val Ser Asp Asn Leu Ala
1 5 10

<210> 18
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> mAb CS-D7 VL CDR2

<400> 18
Gly Ala Ser Thr Arg Ala Thr
1 5

<210> 19
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> mAb CS-D7 VL CDR3

<400> 19
Gln Gln Tyr Asn Asn Trp Arg Pro Val Thr
1 5 10

<210> 20
 <211> 14
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> mAb CS-E11 VL CDR1

<400> 20
Thr Gly Asp Arg Ser Asn Ile Gly Ala Thr Tyr Asp Val His
1 5 10

<210> 21
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> mAb CS-E11 VL CDR2

<400> 21
Gly Asn His Asn Arg Pro Ser
1 5

<210> 22
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> mAb CS-E11 VL CDR3

<400> 22
Gln Ser Tyr Asp Ser Gly Leu Ser Gly Tyr Val
1 5 10

<210> 23
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> mAb CS-D10 VL CDR1

<400> 23
Thr Gly Gly Ser Ser Asn Ile Gly Ala Gly Tyr Asp Val His
1 5 10

<210> 24
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> mAb CS-D10 VL CDR2

<400> 24
Gly Asn Ser Asn Arg Pro Ser
1 5

<210> 25
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> mAb CS-D10 VL CDR3

<400> 25
Gln Ser Tyr Asp Ser Ser Leu Asn Gly Pro Val Val
1 5 10

<210> 26
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> mAb CS-A10 VL CDR1

<400> 26
Ser Gly Asp Asn Leu Gly Asp Lys Ser Val Ser
1 5 10

<210> 27
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> mAb CS-A10 VL CDR2

<400> 27
Gln Gly Ser Lys Arg Pro Leu
1 5

<210> 28
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> mAb CS-A10 VL CDR3

<400> 28
Gln Thr Trp Asp Arg Tyr Thr Gly Val Val
1 5 10

<210> 29
 <211> 14
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> mAbs BMV-H11, BMV-E6 and BMV-D4 VL CDR1

<400> 29
 Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser
 1 5 10

<210> 30
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> mAbs BMV-H11, BMV-E6 and BMV-D4 VL CDR2

<400> 30
 Glu Gly Ser Lys Arg Pro Ser
 1 5

<210> 31
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> mAbs BMV-H11, BMV-E6 and BMV-D4 VL CDR3

<400> 31
 Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val
 1 5 10

<210> 32
 <211> 13
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> mAb BMV-C2 VL CDR1

<400> 32
 Ser Gly Ser Thr Ser Asn Ile Gly Asn Asn Tyr Val Ser
 1 5 10

<210> 33
 <211> 7
 <212> PRT

<213> Artificial Sequence

<220>

<223> mAb BMV-C2 VL CDR2

<400> 33

Asp Val Ser Lys Arg Pro Ser
1 5

<210> 34

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> mAb BMV-C2 VL CDR3

<400> 34

Ala Ala Trp Asp Asp Ser Leu Ser Glu Phe Leu
1 5 10

<210> 35

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> mAbs CS-D7, CS-E11, CS-D10 and CS-A10 VH CDR1

<400> 35

Gly Gly Ser Ile Arg Ser Ser Ser Tyr Tyr Trp Gly
1 5 10

<210> 36

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> mAbs CS-D7 and CS-E11 VH CDR2

<400> 36

Asn Val Phe Phe Ser Gly Ser Ala Tyr Tyr Asn Pro Ser Leu Lys Asn
1 5 10 15

<210> 37

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> mAbs CS-D7, CS-E11, CS-D10 and CS-A10 VH CDR3

<400> 37

Pro Gln Ala Tyr Ser His Asp Ser Ser Gly His Ser Pro Phe Asp Leu
1 5 10 15

<210> 38

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> mAb CS-D10 VH CDR2

<400> 38

Asn Val Phe Phe Ser Gly Ser Ala Tyr Tyr Asn Pro Ser Leu Lys Ser
1 5 10 15

<210> 39

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> mAb CS-A10 VH CDR2

<400> 39

Asn Val Phe Phe Ser Gly Ser Ala Tyr Tyr Asn Pro Ser Leu Lys Gly
1 5 10 15

<210> 40

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> mAbs BMV-H11, BMV-E6, BMV-D4 and BMV-C2 VH CDR1

<400> 40

Gly Gly Ser Ile Ser Ser Ser Ser Tyr Tyr Trp Gly
1 5 10

<210> 41

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> mAb BMV-H11 VH CDR2

<400> 41
 Asn Met Phe Tyr Ser Gly Gly Ala Tyr Tyr Asn Pro Ser Leu Lys Ser
 1 5 10 15

<210> 42
 <211> 18
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> mAbs BMV-H11 and BMV-C2 VH CDR3

<400> 42
 Pro Leu Gly Tyr Asn Phe Asp Ser Ser Gly Gln Gly Lys Ser Ala Phe
 1 5 10 15
 Glu Ile

<210> 43
 <211> 16
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> mAbs BMV-E6 and BMV-C2 VH CDR2

<400> 43
 Asn Met Phe Tyr Ser Gly Ser Ala Tyr Tyr Asn Pro Ser Leu Lys Ser
 1 5 10 15

<210> 44
 <211> 16
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> mAb BMV-D4 VH CDR2

<400> 44
 Asn Met Phe Tyr Ser Gly Gly Ala Tyr Tyr Asn Pro Ser Leu Lys Asn
 1 5 10 15

<210> 45
 <211> 18
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> mAbs BMV-E6 and BMV-C2 VH CDR3

<400> 45

Pro Leu Gly His Asn Phe Asp Ser Ser Gly Gln Gly Glu Gly Ala Phe
 1 5 10 15
 Glu Ile

<210> 46

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> consensus sequence of SEQ ID NOs: 35 and 40

<220>

<221> VARIANT

<222> 5

<223> Xaa = any amino acid

<400> 46

Gly Gly Ser Ile Xaa Ser Ser Ser Tyr Tyr Trp Gly
 1 5 10

<210> 47

<211> 645

<212> PRT

<213> Staphylococcus aureus

<400> 47

Met Asn Lys Gln Gln Lys Glu Phe Lys Ser Phe Tyr Ser Ile Arg Lys
 1 5 10 15
 Ser Ser Leu Gly Val Ala Ser Val Ala Ile Ser Thr Leu Leu Leu Leu
 20 25 30
 Met Ser Asn Gly Glu Ala Gln Ala Ala Glu Glu Thr Gly Gly Thr
 35 40 45
 Asn Thr Glu Ala Gln Pro Lys Thr Glu Ala Val Ala Ser Pro Thr Thr
 50 55 60
 Thr Ser Glu Lys Ala Pro Glu Thr Lys Pro Val Ala Asn Ala Val Ser
 65 70 75 80
 Val Ser Asn Lys Glu Val Glu Ala Pro Thr Ser Glu Thr Lys Glu Ala
 85 90 95
 Lys Glu Val Lys Glu Val Lys Ala Pro Lys Glu Thr Lys Ala Val Lys
 100 105 110
 Pro Ala Ala Lys Ala Thr Asn Asn Thr Tyr Pro Ile Leu Asn Gln Glu
 115 120 125
 Leu Arg Glu Ala Ile Lys Asn Pro Ala Ile Lys Asp Lys Asp His Ser
 130 135 140
 Ala Pro Asn Ser Arg Pro Ile Asp Phe Glu Met Lys Lys Glu Asn Gly
 145 150 155 160
 Glu Gln Gln Phe Tyr His Tyr Ala Ser Ser Val Lys Pro Ala Arg Val
 165 170 175
 Ile Phe Thr Asp Ser Lys Pro Glu Ile Glu Leu Gly Leu Gln Ser Gly
 180 185 190

Gln	Phe	Trp	Arg	Lys	Phe	Glu	Val	Tyr	Glu	Gly	Asp	Lys	Lys	Leu	Pro
		195					200					205			
Ile	Lys	Leu	Val	Ser	Tyr	Asp	Thr	Val	Lys	Asp	Tyr	Ala	Tyr	Ile	Arg
	210					215					220				
Phe	Ser	Val	Ser	Asn	Gly	Thr	Lys	Ala	Val	Lys	Ile	Val	Ser	Ser	Thr
225					230					235					240
His	Phe	Asn	Asn	Lys	Glu	Glu	Lys	Tyr	Asp	Tyr	Thr	Leu	Met	Glu	Phe
				245					250					255	
Ala	Gln	Pro	Ile	Tyr	Asn	Ser	Ala	Asp	Lys	Phe	Lys	Thr	Glu	Glu	Asp
			260					265					270		
Tyr	Lys	Ala	Glu	Lys	Leu	Leu	Ala	Pro	Tyr	Lys	Lys	Ala	Lys	Thr	Leu
		275					280					285			
Glu	Arg	Gln	Val	Tyr	Glu	Leu	Asn	Lys	Ile	Gln	Asp	Lys	Leu	Pro	Glu
	290					295					300				
Lys	Leu	Lys	Ala	Glu	Tyr	Lys	Lys	Lys	Leu	Glu	Asp	Thr	Lys	Lys	Ala
305					310					315					320
Leu	Asp	Glu	Gln	Val	Lys	Ser	Ala	Ile	Thr	Glu	Phe	Gln	Asn	Val	Gln
				325					330					335	
Pro	Thr	Asn	Glu	Lys	Met	Thr	Asp	Leu	Gln	Asp	Thr	Lys	Tyr	Val	Val
			340					345					350		
Tyr	Glu	Ser	Val	Glu	Asn	Asn	Glu	Ser	Met	Met	Asp	Thr	Phe	Val	Lys
		355					360					365			
His	Pro	Ile	Lys	Thr	Gly	Met	Leu	Asn	Gly	Lys	Lys	Tyr	Met	Val	Met
	370					375					380				
Glu	Thr	Thr	Asn	Asp	Asp	Tyr	Trp	Lys	Asp	Phe	Met	Val	Glu	Gly	Gln
385					390					395					400
Arg	Val	Arg	Thr	Ile	Ser	Lys	Asp	Ala	Lys	Asn	Asn	Thr	Arg	Thr	Ile
				405					410					415	
Ile	Phe	Pro	Tyr	Val	Glu	Gly	Lys	Thr	Leu	Tyr	Asp	Ala	Ile	Val	Lys
			420					425					430		
Val	His	Val	Lys	Thr	Ile	Asp	Tyr	Asp	Gly	Gln	Tyr	His	Val	Arg	Ile
		435					440					445			
Val	Asp	Lys	Glu	Ala	Phe	Thr	Lys	Ala	Asn	Thr	Asp	Lys	Ser	Asn	Lys
	450					455					460				
Lys	Glu	Gln	Gln	Asp	Asn	Ser	Ala	Lys	Lys	Glu	Ala	Thr	Pro	Ala	Thr
465					470					475					480
Pro	Ser	Lys	Pro	Thr	Pro	Ser	Pro	Val	Glu	Lys	Glu	Ser	Gln	Lys	Gln
				485					490					495	
Asp	Ser	Gln	Lys	Asp	Asp	Asn	Lys	Gln	Leu	Pro	Ser	Val	Glu	Lys	Glu
			500					505					510		
Asn	Asp	Ala	Ser	Ser	Glu	Ser	Gly	Lys	Asp	Lys	Thr	Pro	Ala	Thr	Lys
		515					520					525			
Pro	Thr	Lys	Gly	Glu	Val	Glu	Ser	Ser	Ser	Thr	Thr	Pro	Thr	Lys	Val
						535						540			
Val	Ser	Thr	Thr	Gln	Asn	Val	Ala	Lys	Pro	Thr	Thr	Ala	Ser	Ser	Lys
545					550					555					560
Thr	Thr	Lys	Asp	Val	Val	Gln	Thr	Ser	Ala	Gly	Ser	Ser	Glu	Ala	Lys
				565					570					575	
Asp	Ser	Ala	Pro	Leu	Gln	Lys	Ala	Asn	Ile	Lys	Asn	Thr	Asn	Asp	Gly
			580					585					590		
His	Thr	Gln	Ser	Gln	Asn	Asn	Lys	Asn	Thr	Gln	Glu	Asn	Lys	Ala	Lys
		595					600					605			
Ser	Leu	Pro	Gln	Thr	Gly	Glu	Glu	Ser	Asn	Lys	Asp	Met	Thr	Leu	Pro
	610					615						620			

Leu Met Ala Leu Leu Ala Leu Ser Ser Ile Val Ala Phe Val Leu Pro
 625 630 635 640
 Arg Lys Arg Lys Asn
 645

<210> 48
 <211> 105
 <212> PRT
 <213> Homo sapien

<400> 48
 Gln Pro Lys Ala Asn Pro Thr Val Thr Leu Phe Pro Pro Ser Ser Glu
 1 5 10 15
 Glu Leu Gln Ala Asn Lys Ala Thr Leu Val Cys Leu Ile Ser Asp Phe
 20 25 30
 Tyr Pro Gly Ala Val Thr Val Ala Trp Lys Ala Asp Gly Ser Pro Val
 35 40 45
 Lys Ala Gly Val Glu Thr Thr Lys Pro Ser Lys Gln Ser Asn Asn Lys
 50 55 60
 Tyr Ala Ala Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln Trp Lys Ser
 65 70 75 80
 His Arg Ser Tyr Ser Cys Gln Val Thr His Glu Gly Ser Thr Val Glu
 85 90 95
 Lys Thr Val Ala Pro Thr Glu Cys Ser
 100 105

<210> 49
 <211> 19
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> heavy chain leader

<400> 49
 Met Glu Trp Ser Trp Val Phe Leu Phe Phe Leu Ser Val Thr Thr Gly
 1 5 10 15
 Val His Ser

<210> 50
 <211> 20
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> light chain leader

<400> 50
 Met Ser Val Pro Thr Gln Val Leu Gly Leu Leu Leu Trp Leu Thr
 1 5 10 15

Asp Ala Arg Cys
20

<210> 51
<211> 36
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide primer

<400> 51
acagatgccca gatgcgaaat tgtgatgaca cagtct 36

<210> 52
<211> 36
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide primer

<400> 52
tgcagccacc gtacgtttaa tctccagtcg tgtccc 36

<210> 53
<211> 36
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide primer

<400> 53
acaggtgtcc actcgcaggt gcagctgcag gagtcg 36

<210> 54
<211> 36
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide primer

<400> 54
gcccttggtg gatgcactcg agacggtgac cagggt 36